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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Jemm Y. Liang
Assignee: Ultrachip, Inc.
Title: LCD DRIVING SYSTEM WITH LOW POWER REQUIREMENTS
Application No.: 09/842,988 Filing Date: April 26, 2001
Examiner: Uchendu O. Anyaso Group Art Unit: 2675
Docket No.: UTCL003US1 Conf. No.: 7880

Certificate of Mailing Under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 13, 2004.


Franklin Dyer

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Technology Center 2600

UTCL003US1
SUMMARY INTERVIEW RECORDS

Sir:

In the telephonic interview on May 5, 2004, Claims 14 and 48 were discussed.

During the interview, the undersigned attorney pointed out that, in one embodiment, the first voltage range that the row electrodes are driven in claim 14 is illustrated by the range V1 to V5 in the field 2xN. During the field 2xN+1, the first voltage range is V2 to V6. During the field 2xN, the second voltage range is from V4 to V6 and during the field 2xN+1, the second voltage range is between V1 and V3. The one or more of the power sources in Claim 14 then drives the row electrodes through the first voltage range, which changes between different addressing fields. The one or more of the power sources drives the column electrodes through the second voltage range, which changes with the first voltage range when the first voltage range changes and with at least the voltage generated or caused to be generated by one of the power sources. Thus, the

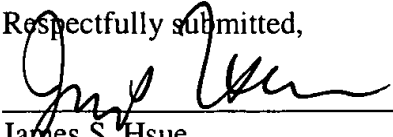
one or more of the power sources drives the column electrodes so that the second voltage range changes with the first voltage range and with at least the voltage generated or caused to be generated by one of the power sources.

The undersigned attorney then pointed out that U.S. Patent 6,262,704 to *Kurumisawa et al.* failed to teach or suggest the above enumerated features of Claim 14. Specifically, Figures 34A and 34B of *Kurumisawa* illustrate a feature, where at least either the scanning lines or the data lines are set to a high-impedance state. As clearly explained in Column 21 of *Kurumisawa*, in order to achieve the feature, at least one of the switches 711, 726 is caused to be opened during a high-impedance mode. The current path is then disconnected so that unnecessary current never flows. As pointed out by the undersigned attorney in the telephone interview, the electrical potential of the disconnected electrodes are at high-impedance state and, therefore, do not change or float with any other voltage or voltage range, contrary to the requirements of Claim 14. The undersigned also pointed out that U.S. Patent 5,764,225 to *Koshobu* also fails to teach the above-described features of Claim 14.

In Claim 48, it was pointed out by the undersigned that this claim covers a feature where at least one of the electrical potentials supplied to the row and column electrodes changes with a voltage supplied or caused to be supplied by one of the power sources and the change of the at least one of the electrical potentials occurs in a predetermined timing relationship to the addressing cycles. Thus, in some of the embodiments, at least one of the electrical potentials supplied to the row and column electrodes changes and such change occurs in the predetermined timing relationship to the addressing cycles, which are illustrated in Figure 2A. It was pointed out that *Kurumisawa* fails to teach such feature.

Date: May 13, 2004

Respectfully submitted,


James S. Hsue

Reg. No. 29,545

PARSONS HSUE & DE RUNTZ LLP

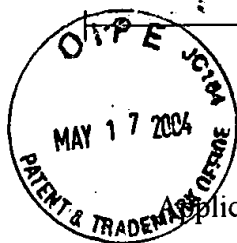
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May 13, 2004

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Dear Sir:

Transmitted herewith are the following documents in the above-identified application:

- (1) Return Receipt Postcard;
- (2) This Transmittal Letter (1 page); and
- (3) UTCL003US1 Summary Interview Records (3 pages).

Please charge any additional fees required and credit any overpayment to our Deposit Account No. 502664.

Date: May 13, 2004

Respectfully submitted,

James S. Hsue
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